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(54) Title: SELECTIVE ADHERENCE OF STENT–GRAFT COVERINGS, MANDREL AND METHOD OF MAKING STENT–GRAFT DEVICE

(57) Abstract

A method for selectively bonding layers of polymeric material, especially expanded polytetrafluoroethylene (ePTFE), to create endoluminal vascular devices. In a preferred method the selective bonding is achieved by applying pressure to selected areas using a textured mandrel. This permits a stent device to be encapsulated between two layers of ePTFE with unbonded slip pockets to accommodate movement of the structural members of the stent. This allows stent compression with minimal force and promotes a low profile of the compressed device. Unbonded regions of ePTFE allow enhanced cellular penetration for rapid healing and can also contain a bioactive substance that will diffuse through the ePTFE to treat the vessel wall.